







Toward a Social Theory of Sexual Risk Behavior among Men in the Armed Forces: Understanding the Military Occupational Habitus



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ORIGINAL PAPER

Toward a Social Theory of Sexual Risk Behavior Among Men in the Armed Services: Understanding the Military Occupational Habitus

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Abstract Worldwide, military personnel have been recognized as a population at elevated risk for sexually transmitted infections (STIs) and HIV; however, it is not well understood how the military occupation itself is implicated in the production of sexual risk behavior. Using qualitative and quantitative data collected from the Belize Defense Force (BDF), we employed a grounded theoretical framework and the Bourdieusian concept of the field and habitus to clarify how the military occupation is implicated in structuring aspects of sexual risk behaviors among personnel. We focus results on in-depth qualitative interviews conducted with 15 male-identified BDF personnel. We identify and describe how two field elements, namely operational tempo and ongoing exposure to occupational hazards, are occupationally specific field elements implicated in the production of sexual risk behavior through the mediating matrix of the military class habitus. Our findings demonstrate a conceptual clarity regarding the institutional field and habitus through which military personnel make sense of and act on the risk of bodily harm with regard to their own sexual behaviors. We conclude by outlining our theoretical concept so that it can be directly applied in public health efforts in order to leverage military occupational field elements for the purpose of HIV and STI prevention.

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Introduction

Worldwide, military personnel have been recognized as a population at elevated risk for sexually transmitted infections (STIs) and HIV. Military personnel have been documented as frequently engaging in casual and commercial sex during peacetime and deployment, and can bridge high-risk sexual networks, particularly among individuals engaging in transactional sex (Anastario et al. 2011; Brodine et al. 2003; Gaydos et al. 2000; Tavarez et al. 2011). Current international efforts that focus on HIV prevention, such as the United States President's Emergency Plan for AIDS Relief (PEPFAR), apportion funding for HIV prevention programs with military personnel worldwide. Despite increasing documentation that military personnel are a population deemed at risk for STIs and HIV, little attention has been given to understanding how or whether the military occupation itself is at all implicated in sexual risk behavior. This is a potentially dangerous gap in the field, given that it allows for conjectures and stereotypes regarding the constitution of military personnel to enter the discourse on HIV prevention. Young, energetic, violent, and hypermasculine tropes of soldiers are often conflated with sexual risk behavior in prevention efforts with military personnel, with little to no substantive reflection on how the military occupation may structure sexual risks. We contend that this discursive gap is due to the limited amount of data available regarding the subjective sexual experiences of military personnel, and that this gap hinders the ability of researchers and practitioners alike to understand how individual and structural factors interact to influence sexual risk behaviors, such as understanding an individual's experience of sex in the context of his or her uniformed occupation.

Pierre Bourdieu's conception of the habitus is useful for developing a framework to "uncover the bodily and cultural logic of epidemiologically risky sexual activities" (Gammeltoft 2002). In this endeavor, we draw from Bourdieu's work in order to explicate the links between individual and structural factors that influence sexual risk behavior in military populations, utilizing data collected through the Belize Defense Force (BDF) as an example. We utilize Bourdieu's concepts of the field, habitus, and doxa to develop a conceptual framework for understanding how the subjective sexual experiences of military personnel are structured by the military field. This is more than just a theoretical exercise; the Bourdieusian framework is helpful for illustrating how specific field elements of the highly regimented military occupation structures mundane behavior, sexual behavior, and sexual risk behavior. Furthermore, this article directly links theoretical reflection to practical implications, as findings may be used to develop an empirically and theoretically grounded discursive "intervention" regarding the role of the military occupation in sexual risk behaviors—which can in turn be used to inform future prevention efforts.



The Habitus, Field, and Doxa

In *Outline of a Theory of Practice* (1977) Pierre Bourdieu delineates the relationship between objective social structures and the subjective experiences and practices of individual agents (Bourdieu 1977). Bourdieu uses the concepts of the field, habitus and doxa to describe the existence, nature, and regeneration of subjective dispositions in an objective social environment.

According to Bourdieu, the "field" may be understood as any structured social space with its own set of social laws and social hierarchies. Bourdieu describes the field as consisting of "objective relations between individuals or institutions," which are regulated by organizing "laws" of experience (Bourdieu 1977). Examples of these social fields include the fields of law, politics, culture, and work. Society in general is composed of multiple social fields, and individual agents typically operate within multiple fields.

Bourdieu explores the relationship between the objective structures of the field and what he refers to as the habitus, "a system of generative schemes objectively adjusted to the particular conditions in which it is constituted." The habitus thus includes individuals' thoughts, perceptions, and actions that are concordant with the conditions of the social field. The relationship between the habitus and the field is dialectic: the habitus reproduces the objective structures of the field, and the field reinforces the logic of the habitus. Bourdieu describes the relationship between the two as the "dialectic of the internalization of externality and the externalization of internality" (Bourdieu 1977). This relationship is in turn mediated by what Bourdieu refers to as "doxa," the "quasi-perfect correspondence between the objective order [the field] and the subjective principles of organization [the habitus]...[in which] the natural and social world appears as self-evident. Doxa is the unsaid in the field of cultural possibilities, making it seem as if there are not multiple, but only a single possibility" (Bourdieu 1977). In other words, doxa comprises the "taken for granted" norms and assumptions that structure society and shape individual behavior. In describing the relationship between the field and habitus, Bourdieu makes reference to the "class habitus," which he uses to describe the incidence of similar dispositions across individuals occupying the same social, economic, or in this case occupational, class.

Here, we examine qualitative interview data collected during the course of a Biological and Behavioral Surveillance Survey (BBSS) of HIV infection in the BDF in order to better examine structural occupational elements affecting the sexual experiences of military personnel. By examining the subjective dispositions of BDF personnel regarding their sexual behavior, and in examining quantitative patterns of behavior within this "occupational class," the concept of class habitus assists in understanding the nature of doxic relationships between the military class habitus and the military occupational field, particularly with regard to sexual risk behavior. In the context of sexual risk behavior, we developed an applied example of class habitus—the military class habitus—to reference understandings of sexual behavior that are shared by individuals within the same occupation.



Methods

Mixed Methods and Grounded Theory

The theoretical framework we develop in this article is based on data derived from the first BBSS to be conducted in the BDF. The BDF is composed of approximately 1,000 personnel located across four bases in Belize. The BDF has the primary task of defending the nation's borders and providing support to civil authorities. Participant selection for the quantitative portion of the study has been described in detail elsewhere (Anastario et al. 2011). Briefly, male and female BDF personnel were systematically selected from an exhaustive list of personnel across four BDF bases between October 2009 and March 2010. Of the 351 personnel who participated in a blood draw (97 % response rate), 334 also completed a questionnaire. For the BBSS endeavor, data were quantified and analyzed to provide the BDF with a prevalence estimate of HIV infection in its population (Anastario et al. 2011), and to better understand select correlates of HIV and STI risk behaviors. The study was approved by a local ethics review board in Belize and by the Western IRB in the United States.

For the present study, we were primarily concerned with addressing sexual risk behavior in male-identified personnel. There is a relatively low prevalence of females in the BDF, and to remain within scope for this analysis, we excluded female personnel from the analytic database. This is not to suggest that the sexual experiences of female-identified personnel do not warrant their own attention; however, the enormity of such an analysis is beyond the scope of this present analysis. The 304 men who completed a questionnaire were included for the present quantitative analysis. Personnel provided informed consent prior to having blood drawn and participating in a questionnaire administered via Audio Computer-Assisted Self-Interview (ACASI). Structured interviews included measures of HIVrelated knowledge, stigma and attitudes, sexual risk behavior as measured with the Risk Behavior Assessment (NIDA 1993), sex with commercial sex workers, as well as mental health measurements including Breslau's 7-item screen for posttraumatic stress disorder (PTSD) (Breslau et al. 1999), the Patient Health Questionnaire-2 screen for depression (Lowe et al. 2005), and the Rapid Alcohol Problems Screen 4-Quantity Frequency (RAPS4-QF) screen for symptoms of alcohol abuse and dependency (Cherpitel 2002).

Semi-structured Interviews

Qualitative data were collected through one-on-one, in-depth semi-structured key informant interviews with 15 male BDF personnel. The first author conducted all qualitative interviews over the course of the BBSS endeavor. Subjects were recruited through a purposive snowball sampling strategy, with "key informants" identified as those BDF personnel who expressed an interest and willingness to speak about their sexual health. Subjects provided informed verbal consent and were provided optional refreshments. Each interview was audio recorded and subsequently transcribed. All audio files were destroyed following transcription.



For our analysis of quantitative and qualitative data from this study, we adopted a "grounded theory" approach in which we systematically coded and analyzed data for emergent themes. Such an approach emphasizes the interplay between data collection and analysis and the "emergence" of theory from data (Corbin 2008). Traditionally, grounded theory has been employed as a method for qualitative data analysis. However, Corbin and Strauss (2008) also note the utility of the approach for mixed method data analysis, recognizing the importance of maintaining a "back and forth interplay" between qualitative and quantitative data, "with qualitative data affecting quantitative analyses and vice versa" (Corbin 2008). For this project, a grounded theory approach allowed us to use both forms of data to explore potential theoretical foundations of "subjectively described" and "objectively measured" behavior. We found the grounded theory approach to be the most appropriate for this data analysis in order to better elucidate the logic of sexual practices in the BDF environment.

Mixed Methods Considerations and Scope Limitations

We adopted a mixed-methods approach to address our primary research questions regarding the influence of the military occupation on sexual risk behavior. The utilization of qualitative and quantitative methods facilitates triangulation or cross validation of data; additionally, as many mixed methods researchers contend, qualitative and quantitative findings inform each other and facilitate a more nuanced understanding of the phenomena under investigation (Bergman 2008; Creswell and Clark 2007). However, this data is not without its limitations. Our quantitative data are only generalizable to male military personnel in Belize, and our qualitative data are only generalizable to the individual men in the BDF who were interviewed. Thus, this mixed methods endeavor is aimed at elucidating rich data in a single environmental context.

Additionally, no research is immune to bias; there always remains the possibility of social desirability bias for the quantitative surveys, and of detail censorship in both the qualitative interviews and the questionnaires. We took several measures to ensure increased levels of comfort across both data collection modalities, including the use of ACASI for quantitative surveys and in conducting qualitative interviews with one civilian male data collector in private locations. The civilian status of the interviewer was critical in mitigating perceptions of retribution for speaking openly about sexual experiences.

Data Analysis

Qualitative data were analyzed using ATLAS.ti qualitative analytic software 6.2 ("ATLAS.ti 2008"). Following the tenets of grounded theory, we first reviewed all transcribed interviews and created a set of open codes (Charmaz 2000, 2006). We then linked open codes to develop axial codes based on our identification of emergent themes in the data. Finally, we developed theoretical codes that are detailed in the Results section of this manuscript.



Quantitative data were analyzed using Stata 10 statistical software (Stata 10, 2007). Simple means and frequencies were examined to determine prevalence and trends. We used the general linear model (GLM) to adjust for potential confounders when modeling outcomes with continuous distributions, and we used logistic regression to adjust for confounders and to estimate the odds ratio (OR) for outcomes with binomial distributions. Statistical significance was established at p < 0.05.

Results

Operational Tempo and the Temporal Distribution of Sexual Risk Behavior

Qualitative Findings

In the BDF, a salient theme that emerged in the interviews was the conceptualization of sexual behavior occurring in tandem with occupationally specific temporal distributions of activity, particularly regarding operational duties and periods of rest and relaxation (R&R). For the purposes of this analysis, we will refer to this biphasic cycle of activity as *operational tempo*. In contrast to civilian work/life cycles, operational duties may include periods lasting several days (e.g., a 14-day deployment into the "bush") followed by a multi-day period of leisure (e.g., a 6-day period of R&R).

When asked to describe his sex life, one subject began his narrative of his sexual behavior by noting that "...most of the time we are not around. You kind of have to monitor your sex life by your free time."

Time "in the field" or time spent on operations was typically framed as time that limited engagement in sexual activities, including sexual encounters among individuals with one steady sexual partner. Oftentimes, periods of occupational activation/deployment were treated as purely asexual, thus "limiting" subjects' ability to engage in sexual behavior with any partner. In describing the limits on his sex life, one subject noted: "Because of the nature of my job, I'm only able to have sex every 2 weeks or a few times a month. At the present moment, I only have one partner."

Subjects described phases of work as those limiting the frequency of sexual acts, limiting the opportunity to engage in sex with multiple concurrent sexual partners, limiting the time in which communication with a sex partner could occur, and as decreasing access to potential sexual partners. Operational temporal periods were broadly conceived of as times in which sex did not generally occur. When asked to provide suggestions for decreasing sexual risk behavior in the BDF, one subject said: "I think what would really be nice is if the guys could have their wives come and stay with them, at least one night. That way we could get sex and we wouldn't be starved for it, we could stay faithful."

Limits on sexual behavior, in turn, structured opportunities to engage in sex that were temporally aligned with leisure periods or R&R. The time period following operations was often described as a phase in which subjects were desirous of sexual



contact. This temporal conceptualization was conflated with a biphasic narrative of sexual activity that included a sexual starvation phase followed by a phase of sexual satiation. Some subjects characterized the desire for sex during leisure periods as extreme, to the point that sexual desire was framed beyond the confines of human control: "If I'm away from home 3 weeks to a month, then I become an animal. It's the environmental change."

Here, descriptions of sexual desire coincided with acts of sexual behavior that could be classified as sexual *risk* behaviors. Sexual behaviors described during periods of R&R included having sex while intoxicated (on alcohol), visiting commercial sex workers, having sex with casual sex partners, having sex without protection, and using sexual coercion (forcing a partner to have sex when the partner is not in the mood, or demanding sex from a partner following operations).

Seeking out sexual partners such as commercial sex workers was frequently described as occurring during periods of R&R. Some subjects specifically referenced their operational tempo to describe the impetus for visiting a commercial sex worker. One member of the BDF noted: "I'll tell you first that when you come home from the bush, you can't go home until the following day, so the brothel is the closest route. A lot of people do that."

Visiting commercial sex workers was an experience that was also described in terms of temporal periods of access and restriction. Indeed, brothels are readily accessible from several of the bases in the BDF, where personnel must return immediately following operational phases, prior to beginning R&R/leisure phases. One subject described his experience of going to brothels: "Most of the time, it's when you get off of hard work, or when you've got off hard patrol, when you're gone for a long time, when you come back you just want to enjoy yourself. If you don't have no woman, or if your woman not around, then you go..."

While venues for transactional sex in Belize are not restricted to brothels, subjects readily identified commercial sex workers as those working in brothels, and widely described accessing sex workers in the context of brothel visitation. Visiting brothels was frequently attributed to boredom/lack of stimulating activity, the proximity of brothels to bases, and as an activity in which subjects may collectively go to drink, relax, and/or to watch women strip. One subject said:

We don't have any games or anything to do here. No billiards, nothing. And so it's easy, a guy asks if you want to go to the brothel and you say 'Yeah, why not?' It's right around the corner, it's the only thing to do, and you have the money to spend. There's lots of boredom here, and nothing to keep you busy.

Alcohol consumption was also described as occurring in temporal alignment with phases of operations and leisure, where alcohol was heavily consumed following operations. One subject described his alcohol consumption and sexual behavior:

And then you go for bush like two to three week, or you go to bush for a month - when you come back out to civilization, you go wild. You get drunk up, there ladies, you intoxicated with the liquor, and right there Mike, you will risk your life to sleep with another woman. And you think hormones kick up. I



want some sex, you know. I can't wait for reach her. And man you go out there and reach her and she give you a lay.

Alcohol consumption was described as occurring during the period immediately following operations, including drinking excessively large quantities of alcohol or binge drinking during periods of R&R. Since both drinking and sexual activities were temporally aligned with a biphasic operational tempo, it is not surprising that the three emerged concurrently as part of a logical process. One soldier said "When I am on courses for a month and 3 weeks…these guys will say I want a cold drink and a hot lady. So we start drinking and go spend the night at the brothel."

Soldiers described consuming alcohol prior to and during brothel visitation, and sex with a commercial sex worker was described as taking place after purchasing drinks at the bar in the brothel. However, the intention behind brothel visitation was not always described as a direct intention to have sex with a commercial sex worker, and brothel visitation was a widespread and culturally accepted activity that did not necessarily result in any sexual encounter.

Consuming alcohol was described as being associated with sexual activity, and subjects often described alcohol consumption as occurring prior to sexual experiences. This included drinking alcohol and then going to a brothel and/or having sex with a commercial sex worker, having sex with casual sex partners while intoxicated, and using alcohol to intentionally delay ejaculation during sex. Highrisk sexual behaviors were also described regarding alcohol use and sex, namely with regard to condom use errors, including difficulty using a condom while intoxicated, and "busting through" condoms while intoxicated and not replacing the damaged condom. As one subject described: "...I didn't have unprotected sex. I use condom, but the condom just broke...yeah when you are intoxicated it is hard because your whole body is numb."

Quantitative Findings

Patterns were detected in the quantitative data that supported the concurrence of behaviors described above. Among the 38.8 % of respondents who reported sex while drunk or high during the 30 days preceding the interview, 39.4 % reported that they engaged in sex that was not intended. Respondents who reported sex while drunk or high during the previous 30 days were over 6 times more likely to report engaging in transactional sex during the previous 30 days (OR = 6.5; 95 % confidence interval [CI] 1.8–23.7; p = 0.005), averaged 1.5 more sex partners during the previous 30 days (beta = 1.5, Z = 4.5, p < 0.001), were 1.6 times more likely to report engaging in inconsistent condom use during vaginal or anal sex during the previous 30 days (OR = 1.6; 95 % CI 1.0–2.7; p = 0.05), and were nearly twice as likely to report having forced a partner to have sex without a condom during the past 12 months (OR = 1.9; 95 % CI 1.1–3.0; p = 0.013).

Summary Bourdieu's conceptualization of doxa includes the notion of a temporal distribution of practices, as time weaves together the objects of experience inculcating the subject. The individual's practices do not necessarily need to exhibit



an underlying adherence to a set of doctrines or beliefs, but rather, the individual precognitively experiences practices as a state of the body, a body that exists in temporal space. As such, the individual is inculcated by simultaneously occurring objective conditions, which are also reproduced in the generative schemes of individuals inhabiting the field. Bourdieu claims that social disciplines

...take the form of temporal disciplines and the whole social order imposes itself at the deepest level of the bodily dispositions through a particular way of regulating the use of time, the temporal distribution of collective and individual activities and the appropriate rhythm with which to perform them. (Bourdieu 1992)

In the context of the BDF occupational environment, sexual practices were verbally described to an outsider (the researcher) as corresponding to subjects' operational tempo, which is determined by the structure of the military occupational field in Belize. The temporal distribution of collective occupational activities and the rhythm in which these practices are enacted are specific to this occupational setting. In describing sexual activities, individuals thus attempted to make sense of their experiences using the practical time implicated in their operational tempo. While this is not a precognitive impulse or disposition, it does point to the structuring aspect of the occupational field. As Bourdieu describes:

...the calendar substitutes a linear, homogenous, continuous time for practical time, which is made up of islands of incommensurable duration, each with its own rhythm, a time that races or drags, depending on what one is doing, that is, on the functions assigned to it by the actions that are performed in it. (Bourdieu 1992)

In the context of sexual behavior in the BDF, we assert that the "practical time" of operational tempo, which objectively structures where personnel are and what they are doing in a given moment is specific to the military occupational field. We thus use Bourdieu's rendering of the temporal distribution of practices to better understand the narrated experiences of specific sexual behaviors and sexual risk behaviors in the BDF. The researchers observed groups of BDF personnel moving through phases of deployment and R&R, which very much determined the concurrent location of multiple bodies.

In the case of the BDF, the conscious explication of a biphasic temporal concurrence of occupational tempo, sexual activity, alcohol consumption, and perceivable group behavior points to a coordination of these practices that is apparent as logical to subjects in the field. When subjected to cross-sectional quantitative analysis, behaviors such as drinking alcohol, having sex while intoxicated, and engaging in sexual risk behaviors were indeed prevalent and correlated. In line with the coordinating field element of occupational tempo, these behaviors coincide with subjective sexual dispositions revealing similar generative schemes regarding engagement in sexual behaviors, pointing to a military class habitus. Bourdieu notes: "The habitus is precisely this immanent law, lex insita, inscribed in bodies by identical histories, which is the precondition not only for the



co-ordination of practices but also for the practices of co-ordination." (Bourdieu 1977)

Given, our data we posit that the military class habitus supports a logic of sexual [risk] behavior occurring in tandem with the structuring field element of occupational tempo. We conclude that operational tempo, in turn, plays a significant role in structuring the sexual behavior and sexual risk taking of BDF personnel.

Occupational Risk and Sexual Risk: Hazard, Trauma, and Coping

Qualitative Findings

During the interviews, subjects described their experiences of trauma in the larger context of their sexual [and sexual risk] behaviors. In the Caribbean region, military personnel may be continuously exposed to occupational hazards that vary markedly from the types of hazards experienced by military personnel in other nation states. For example, the experiences of personnel who deploy into combat zones in foreign countries for discrete periods of time would be markedly different from ongoing, within-country exposures. In particular, region-specific occupational hazards for Caribbean military personnel occur during events such as regularly assisting during disaster relief efforts (e.g., hurricanes, floods, large accidents resulting from weather), aiding the police in drug interdiction efforts (which may require unexpected and/or close-range gunfire); and being involved in regular operational deployments within their own nation's borders. Thus, the likelihood of exposure to particular hazards capable of traumatizing the individual remains high for Caribbean military personnel.

Individuals interviewed described a wide range of lifetime traumatic events, from trauma incurred prior to entering the BDF, such as violence experienced in childhood, to traumas directly experienced as part of the BDF occupation. Several subjects reported hearing or experiencing gunfire as a traumatic experience. One subject described the following:

The most disturbing thing on the job...would be when I was on the...border, we were doing an adjacency control...and all of the sudden these bullets started flying in our direction. We had to take cover, we didn't see it, just bullets flying over our head. We didn't see who was shooting.

Further, occupational hazards experienced during BDF service provoked some subjects' memories of previous trauma(s). This included the sound of gunfire at work triggering previous traumatic experiences.

Among individuals who reported exposure to hazardous events, several symptoms of trauma were described, including dreaming about the event/flashbacks, feeling numb or "away," and feeling an impending sense of death. One subject who had experienced several hazardous events during his lifetime described the following: "...obviously it make me feel like I'm not gonna live long. I don't really know what really happening. But if the good lord ready to take my life then I can't run from it, cause it just a matter of life and death."



This same subject went on to describe the following scenario within his sex life:

Sometimes I would go and drink, meet some strange girl, and let the liquor down in your body, so you don't care about put on condom, or even if you put on condom and you start have sex and the condom bust, you don't give...You just continue cause it entice your feelings. And after you done recover from the drinking the other day, you like..."I wonder if this girl sick, you know? I wonder if I sick, you know?" That the way I kind of feel, how I think you willing to risk your life sometimes with this sex thing.

For this particular individual who described the perception of a shortened time horizon for his life course, the known consequences of sexual risk behavior did not inhibit him from persistently engaging in sexual risks.

In some circumstances, individuals consciously linked their traumatic experiences and current mental health symptoms directly with their sex lives. One individual described the following traumatic event during a field operation to apprehend a "wanted" individual:

I was on that operation, and that is where we had a confrontation with him and we had to open fire. He was not far away, he was like 20 or 25 feet away. I see blood spattered everywhere. That affect me sometime, especially when I am takin' a couple drinks. It's a flashback, yeah man. Yeah, like behind my head, it shivers. Sometime I have to rub my neck like that, I feel like I'm going to drop...going dizziness. It goes, I tremble. Sometime I do that and I simply can't take more of the alcohol sometime, so I will slow down from taking any more drinks. And that also affects my sex...sometime, when I am in bed, I will have my wife in hug, and that will automatically come in my mind, and the feeling just goes away. I pull my hand away from my wife and she asks me what happened?

BDF personnel are cognizant of the direct risks and hazards evident in their line of work. Regardless of whether a hazardous event was interpreted as traumatic, several individuals linked occupational stressors with their sexual behavior.

The experience of occupational hazards *producing trauma* and occupational *stressors* may be viewed by BDF personnel as components of the same continuum. It is not surprising that the "drinking culture" described by personnel in the defense force was regularly linked with the unique stress of military life. One subject described that "…alcoholism is a real problem in the BDF. It comes from military tradition. Every military man knows that. When you have free time, beers come along. That is the problem with it."

Furthermore, several individuals reported using alcohol to cope with symptoms of trauma. As one subject described it:

Personally, I ignore it. I try to ignore everything. Pretend as though it didn't happen. I feel that numb feeling. I would say, almost all the time since I experienced that thing. Sometimes you have to have a way to have feelings, because you have lost all feelings. You need to find a way to have emotions.



To get over it...alcoholism. I usually drink all weekend, from morning to night. Twenty four beers in a day.

Regardless of whether personnel were drinking alcohol to cope with traumatic memories or drinking alcohol as party of the "military tradition," the mere prevalence of alcohol consumption was a noteworthy element described by personnel.

Quantitative Findings

In the BDF, 18.3 % of men screened positive for probable PTSD. In a GLM adjusted for the potential confounding effects of age and current experience of depression, there was a positive relationship between number of years in the BDF and number of hazardous exposures among men with PTSD (beta = 0.46, SE = 0.23; Z = 2.1; p = 0.04). The number of lifetime hazardous exposures was higher among men with PTSD (mean = 4.5, SD = 2.6) than among men without PTSD (mean = 2.8, SD = 1.9) (ItI = 5.5; df = 286; p < 0.001). In comparison to personnel without PTSD, personnel with PTSD were twice as likely to report sex with a commercial sex worker during the 12 months preceding the interview (OR = 2.0; 95 % CI 1.1–3.7; p = 0.03) and personnel with PTSD were twice as likely to report sex while drunk or high during the 30 days preceding the interview (OR = 1.95; 95 % CI 1.1–3.6; p = 0.03). For the entire sample, number of lifetime hazardous exposures was positively correlated with number of symptoms of alcohol abuse on the RAPS4-QF (r = 0.26; p < 0.001).

Summary

Unlike occupational tempo, exposures to occupational hazards were less predictable, yet somewhat inevitable components of the military occupational field. In contrast to military personnel who deploy for combat, the hazardous occupational exposures experienced by Caribbean military personnel are not contained within the parameters of discrete periods of deployment. This normalizes the unpredictable and omnipresent experience of trauma and occupational hazards in an individual's normal occupation. Further, personnel who develop PTSD may use alcohol to cope with symptoms of trauma and/or PTSD. For personnel with and without PTSD, binge drinking is interpreted as a component of military culture. Coping practices such as excessive alcohol consumption are built into the military occupational social field and habitus, in turn contributing to the normalization of heavy drinking behavior for personnel with or without PTSD.

Personnel recognize and describe occupational hazards, binge drinking, and the existence of readily available sex with casual partners as elements of their cultural field. The unquestionable impact of trauma on patterns of thinking, however, points toward an occupational class habitus that may indeed involve precognitive behaviors that are affected by the presence of trauma and PTSD, which is structurally reinforced by the persistent exposure to occupational hazards. In essence, hazards and risk behaviors comprise part of a military culture. Bourdieu



notes that practical logic has a stylistic unity which, though perceptible, does not exhibit the coherence of a plan or pathway (Bourdieu 1992). We suggest that the concept of the military class habitus supports the observation that personnel have developed a local logic that implicates the omnipresence of occupational hazards in risk behaviors. It is through the military class habitus that the norms of the military occupational field are reproduced, simultaneously reproducing culturally-accepted coping mechanisms for symptoms of trauma. Understanding the doxic relationship between the military occupational field and the military class habitus is important for understanding one of the mechanisms by which soldiers may use alcohol and sex to cope with the trauma produced by occupational hazards, or to participate in a broader culture which includes occupational hazards and risk behaviors.

Discussion

Our use of a grounded theoretical approach led us to identify two major elements of the military occupational field, namely operational tempo and persistent occupational hazards, which are implicated in the descriptions of sexual risk behaviors by military personnel. Further, our use of a grounded approach in the context of a mixed methods study allowed us to maintain an ongoing interplay between data collection, analysis and theory formation, ultimately facilitating the emergence of theory from data (Corbin 2008). Our results challenge stereotypes that often frame HIV prevention discourse regarding military personnel, and illustrate how in the Belizean environment, the military occupational field structures risk behavior.

The figure provides a visual representation of the theoretical framework we employ for analyzing the relationship between the military occupation and the subjective sexual experiences of personnel employed by the military. As shown in this figure, the relationship between the military occupation and the military class habitus is mediated by doxic relations, which bring key elements of the structural, objective occupation to bear on the subjective realm of the habitus. The arrows point in both directions, to underscore the dialectical relationship between the military class habitus and the military occupational field. Through the dialectic relationship between the military class habitus and field, the subjective dispositions of individuals in accordance with the objective conditions of the field appear as normalized and naturalized, reflecting the local logic of sex, which emerged in the qualitative interviews with BDF personnel. Further, the externalizing component of the military class habitus in turn lends to the reproduction of intra-occupational norms. We consider below how the data may be used in an applied context to specifically inform novel prevention efforts within this population, particularly with regard to the occupational field elements of operational tempo and ongoing hazardous exposures (Fig. 1).

Our findings on operational tempo suggest that the incidence of sexual risk behaviors coincides with practical tempo, where risk behaviors are temporally correlated with phases of operational duties. Thus, this research provides a theoretically grounded justification for conducting prevention activities during the phase immediately following operations, immediately prior to R&R. Possible



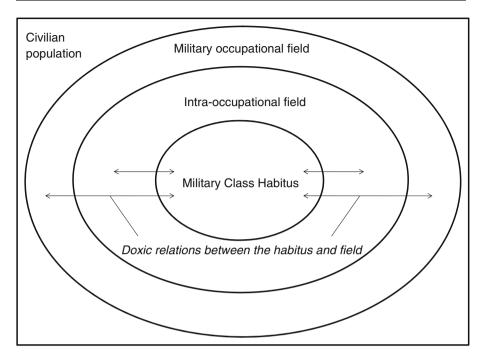


Fig. 1 The military field, class habitus, and doxic relationships

prevention strategies informed by this research may include surging condom provision immediately following operational deployment periods, incorporating HIV prevention programs with postdeployment briefing sessions, and using operational period rotations as systematic prompts for the local medical unit to ensure that local brothels are well equipped with condoms. Further, condom accessibility and procurement can be coordinated to concur with operational deployment periods, and the Ministry of Health and National AIDS Program could use these temporal cycles to plan condom distribution and to avoid systematic stock outs during time periods in which demand surges. A prevention approach that truly incorporates structural findings may aim to systematically alter phases of operational tempo to impact risk behaviors. Future evaluation of the efficacy of such a strategy would be required.

The findings on occupational hazards and PTSD are somewhat more complex, and point more toward the mechanisms of a class habitus. PTSD is an anxiety disorder which arises from exposure to overwhelmingly stressful events, and is characterized by symptoms of re-experiencing, avoidance and numbing, and arousal (DSM-IV 2000). The experience of trauma and the development of PTSD have both been documented as prevalent in military personnel (Allen et al. 2010; Anastario et al. 2011; Coleman 2007; Hoge et al. 2006). While PTSD has been documented as a correlate of sexual risk behavior in both uniformed and non-uniformed populations (Hoff et al. 1997; Holmes et al. 2005; Hutton et al. 2001; Smit et al.



2006; Stiffman et al. 1992; Tavarez et al. 2011), there is little understanding of the social dynamics underlying this relationship. The mere fact that occupational trauma was salient for BDF personnel in describing their sexual behaviors calls attention to the structuring role of the military occupation in individuals' sexual behavior. However, the ability of PTSD to alter a subject's time horizon, thereby impact his perception of the relative consequences of risk behavior, points toward the doxa in the military class habitus and field. Previous research has shown that individuals with PTSD experience marked changes in their interpersonal relationships (Bleiberg and Markowitz 2005), and that PTSD may be associated with interpersonal impairment, isolation, a lack of trust in others, decreased self esteem, an increased propensity for intimate partner violence, verbal communication problems with a partner, and decreases in marital satisfaction, confidence in a relationship, and dedication to a relationship (Allen et al. 2010; Teten et al. 2010; Costa et al. 2010; Solomon et al. 2008; Maguen et al. 2009). Exposing a population to hazards that may result in PTSD will likely make the behavioral sequelae of those exposures (such as sexual risk) prevalent. In the case of the BDF, occupational hazards and trauma were evident in the narratives of personnel regarding their sexual experiences, and validated by the quantitative link between PTSD and sexual risks.

Our findings on occupational hazards have direct applicability to HIV prevention efforts in the BDF population. For example, screening personnel for traumatic exposures during battle fitness tests and/or annual physical tests may help to identify at-risk individuals who would benefit from available mental health services. Further, proactively identifying and providing personnel who have experienced occupational hazards with preventive counseling would be an additional strategy. Currently, addressing mental health is not common in HIV and STI prevention efforts with the military, and it may serve as a beneficial strategy to leverage population reductions in sexual risk behavior. In one randomized trial of a trauma-focused group therapy intervention which focused on developing safe coping skills, communication and boundary setting, and identifying/reducing unsafe behaviors in women with substance use disorders and PTSD, a reduction in the number of unprotected sexual occasions in high-risk individuals was found over a 12-month period (Hien et al. 2010). Further research should be conducted to examine whether male military personnel would similarly benefit from mental health interventions that are part of a strategic HIV and STI prevention plan. Finally, a structurally preventive approach would be to systematically decrease occupational hazards and the experience of trauma, thereby preventing potential risk behavioral sequelae. Future evaluation of such an intervention would be required.

Our findings and suggestions do not stand in opposition to predominant psychological models of health behavior which are used in the health sciences to explain sexual risk behavior, nor do they stand in opposition to studies of military personnel which exhibit relationships between sexual risk behavior, alcohol abuse and/or PTSD (Anastario et al. 2010; Brodine et al. 2003; Hart 1974; Hoff et al. 1997; MacQueen et al. 1996; Tavarez et al. 2011). Rather, our findings illustrate how occupational field elements are implicated in the production of sexual risk behavior within one military occupation, rather than tropes of young, camouflaged,



violent, hypermasculine soldiers. In addition, individual components of these findings, such as brothel visitation with coworkers, are not necessarily unique to the military occupation alone. In her ethnographic work on an AIDS hotline, Elizabeth Miller describes how Japanese men calling into the hotline described transactional sex in the context of a night out with coworkers and/or business clients (Miller 2002). In claiming that the military occupation is implicated in structuring sexual risk behavior of personnel, we propose that the mechanisms implicated in producing these similar risk behaviors are local. Our use of a Bourdieusian theoretical framework helped us to link elements of one military occupation to individual sexual behavior by highlighting how the military occupation is woven into the sexual dispositions of personnel employed by it.

Our findings raise several additional areas of inquiry. These include a further and deeper mapping the military class habitus, including the need for the collection of further ethnographic data that could better elucidate the local subjectivity of military sexuality. The military class habitus is likely to include more nuanced dimensions, which may be stratified by rank, service (e.g., air force, navy, army), and domain of performed work. In future endeavors, we hope to use the production of military sexuality as a starting point for understanding the many ways in which sexual risk behaviors and HIV/STI transmission risks are structured in various uniformed service populations.

Limitations

We recognize that in addition to occupational tempo and occupational hazards, numerous other elements of the military occupational field may influence descriptions of sexual risk behavior among military personnel, and that our data only touch upon the more salient aspects of the military class habitus that BDF personnel felt salient enough to disclose to an outsider. A full ethnography would be required to elucidate the class habitus, and our study only included interviews in the context of a BBSS. For the BDF population interviewed, these two elements emerged as dominant strains of the local, occupational-specific logic used to make sense of individuals' sexual behavior. However, a wide variety of field elements may exist which were not elucidated in these interviews, perhaps due to methodological restrictions of this current study (we relied heavily on qualitative interview data and we did not rely heavily upon alternative methods, such as participant observation, to draw conclusions regarding the field elements identified in this manuscript). Future research might provide a more in-depth examination of the military habitus (that was beyond the scope of this project), exploring how various "senses" that comprise the military class habitus, reflecting a doxic relationship with the military occupational field, are implicated in the subjective experiences of military personnel engaging in risky sexual behavior. Beyond the sense of time as a structuring factor and the sense of risk/fatalism, additional senses may emerge in future analyses of the military class habitus (for example, a sense of a sexual excursion, a sense of power in one's uniform, a sense of authority, a sense of invincibility, a sense of an erotic cycle, etc.). Despite these limitations, we believe that our findings offer important contributions to the interdisciplinary study



of sexual risk behavior. Our grounded theoretical analysis of sexual risk behavior within the BDF helps to elucidate some of the mechanisms by which the objective structure of the military occupation interacts with the subjective realm of the military class habitus, lending to the production of a sexually at risk population distinguished by its occupational boundaries. In addition to making a theoretical contribution to the study of sexual risk behavior in the social context of the military occupation, this study also points to the importance of using theory to inform public health research and the development of public health interventions.

Conclusion

In this study, we have contributed rich contextual data from the BDF to identify and describe how two field elements, namely operational tempo and ongoing exposure to occupational hazards, are occupationally specific elements implicated in the production of sexual risk behavior through the mediating matrix of the military class habitus. Our findings demonstrate a conceptual clarity regarding the institutional field and habitus through which military personnel make sense of and act on the risk of bodily harm with regard to their own sexual behaviors. Our results challenge stereotypes regarding military personnel that are current regarding military personnel and HIV prevention, and illustrate individuals' subjective experiences of sex in the context of their military occupation.

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14. ABSTRACT

Worldwide, military personnel have been recognized as a population at elevated risk for sexually transmitted infections (STIs) and HIV. However, it is not well understood how the military occupation itself is implicated in the production of sexual risk behavior. Using qualitative and quantitative data collected from the Belize Defense Force (BDF), we employed a grounded theoretical framework and the Bourdieusian concept of the habitus to clarify how the military occupation is implicated in structuring aspects of sexual risk behaviors among personnel. We focus results on in-depth qualitative interviews conducted with 15 male-identified military personnel in the BDF. We identify and describe how two field elements, namely operational tempo and ongoing exposure to occupational hazards, are occupationally -specific elements implicated in the production of sexual risk behavior through the mediating matrix of the military class habitus. Our findings demonstrate a conceptual clarity regarding the institutional field and habitus through which military personnel make sense of and act on the risk of bodily harm with regard to their own sexual behaviors. We conclude by proposing a theoretical framework that can be directly applied in public health efforts in order to leverage military occupational field elements for the purpose of HIV and STI prevention.

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